

Title (en)

LOW-FOAMING CORROSION INHIBITORS WITH MICROBIOCIDAL PROPERTIES, THAT CONTAIN ALKANOLAMINE-BORIC ACID REACTION PRODUCTS AS THE ACTIVE INGREDIENTS

Publication

EP 0015442 B1 19820324 (DE)

Application

EP 80100845 A 19800221

Priority

DE 2908301 A 19790303

Abstract (en)

[origin: EP0015442A1] 1. Low-foam microbiostatic or microbicidal corrosion inhibitors for iron, iron-containing metals, aluminium or aluminium-containing metals, consisting of (a) at least one reaction product of orthoboric acid and at least one alkanolamine, containing 2 or 3 carbon atoms per alkanol group, in a molar ratio of 1:1 to 1:4, and (b) at least one other component which consists of (b1) a mono-, di- or trialkanolamine salt of a maleamic acid of the formula I $R-NH-CO-CH=CH-COOH$ where R is isoalkyl whose longest chain has 6 to 8 carbon atoms and which contains a total of 8 to 12 carbon atoms, or (b2) a compound of the formula II see diagramm : EP0015442,P7,F2 where R**1 is a linear or branched, saturated or olefinically or acetylenically unsaturated alkyl of 1 to 18 carbon atoms, or if R**1 is an unsaturated radical, it contains 3 to 18 carbon atoms, the alkyl optionally containing methoxy or ethoxy groups, or R**1 is cycloalkyl having 5 to 12 members, phenyl optionally substituted by alkyl of 1 to 3 carbon atoms, a methoxy or ethoxy group or halogen, or is phenylalkyl containing 1 to 5 carbon atoms per alkyl ; R**2 is hydrogen or R**1 ; R**1 and R**2 together with the nitrogen atom form a piperidine, piperazine, pyrrolidine or morpholine ring ; R**3 is alkylene of 2 to 5 carbon atoms ; and X**+ is an alkali metal or ammonium cation, or a cation derived from mono-, di- and trimethylamine, mono-, di- and triethylamine, mono-, di- and triisopropylamine, mono-, di- and triisobutylamine, 2-methoxyethylamine, 3-methoxypropylamine, 2-ethylhexylamine, mono-, di- and triethanolamine, 3-aminopropanol, cyclohexylamine, N,N-dimethylcyclohexylamine, morpholine, pyridine, quinoline, ethylenediamine, diethylenetriamine, pentaethylenhexamine or an ethoxylated or propoxylated primary amine, or is a proton, or consists of a mixture of (b1) and (b2), the weight ratio of (a) to (b) being 85:15 to 15:85.

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